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| 7590 03/05/2008 HEWLETT-PACKARD COMPANY Intellectual Property Administration P. O. Box 272400 Fort Collins, CO 80527-2400 | | | EXAMINER VU. THONG H | |
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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GROUP 2600

Application Number: 09/819,911 Filing Date: March 28, 2001

Appellant(s): CROSSON, DANIEL

Dan C. Hu #40,025 For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/26/07 appealing from the Office action mailed 2/06/07.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| 6,779,017 | LAMBERTON et al | 8-2004 |
|-----------|-----------------|--------|
| 6,272,129 | DYNARSKI et al | 8-2001 |

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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton et al [Lamberton, 6,779,017 B1] in view of Dynarski et al [Dynarski 6,272,129 B1].

1. As per claim 1, Lamberton discloses a method for Internet protocol (IP) address selection, comprising the steps of:

a single domain name to a set of server IP addresses corresponding to plural servers receiving a request for the domain name from a client IP address [Lamberton, single DNS, IP address, the cluster of servers, col 5 lines 1-26];

retrieving a set of IP routes linking the server IP addresses and the client IP address [Lamberton, supporting a given of set of services, col 5 lines 30-35; a packet contains the source IP address and destination address as the IP address of the cluster server, col 5 lines 14];

selecting an IP route (from the set of routes) which meets predetermined criteria [Lamberton, the request is forwarded to server that met the criterion for being elected, col 6 lines 35-40; selected server carrying the actual DNS name as required, col 7 lines 11-27, Fig 4].

However Lamberton does not explicitly detail

Predetermined criteria

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An Ordinary skill in the art would look into the Internet-DNS art to improve the Lamberton's apparatus performance and found Dynarski's teaching.

Dynarski taught the computer network may exchange information [Dynarski, Internet, col 5 line 7; IP address domain, col 16 line 64] and searching a database to determine if a system bus/PPP session or path already exists [Dynarski, col 15 lines 50-55]. It's clearly that the session already exists represent a route or PPP link between client/server nodes.

Therefore it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate the technique of selecting an IP address from a database contain a set of addresses with predetermined criteria or PPP sessions as taught by Dynarski into the Lamberton's apparatus in order utilize the exchange information process between network nodes.

Doing so would provide a simple, efficient and automatic way of permitting the communication between nodes.

- 2. As per claims 2,11 Lamberton-Dynarski disclose retrieving the set of IP routes from a cache database [Lamberton, database, col 1 lines 55-60].
- 3. As per claims 3,12 Lamberton-Dynarski disclose retrieving the set of IP routes from an IP routes database [Lamberton, database, col 1 lines 55-60].
- 4. As per claim 4, Lamberton-Dynarski disclose retrieving the set of IP routes from a set of routers using a BGP protocol as inherent feature of gateway, firewall [Lamberton, col 3 lines 24,49].

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5. As per claim 6, Lamberton-Dynarski disclose retrieving the set of IP routes from a set of routers using a Telnet protocol as [Lamvberton, set of services, col 6 lines 6-15].

- 6. As per claim 7, Lamberton-Dynarski disclose selecting the IP route from the set which has a shortest AS path (Autonomous System) as inherent feature of gateway, router.
- 7. As per claim 8, Lamberton-Dynarski disclose selecting the IP route from the set which has a lowest origin type [Lamberton, select the least busy servers, col 6 line 28].
- 8. As per claim 9, Lamberton-Dynarski disclose selecting the IP route from the set which has a lowest MED (Multi-Exit-Disc) [Lamberton, select the least busy of the servers, col 6 line 28].
- 9. As per claim 10, Lamberton-Dynarski disclose selecting the IP route from the set equal to a default IP address [Lamvberton, set of services, col 6 lines 6-15].
- 10. As per claim 14, Lamberton-Dynarski disclose transmitting an IP address from the set of server IP addresses which corresponds to the selected IP route [Lamvberton, set of services, col 6 lines 6-15].
- 11. As per claim 25 contains the similar limitations set forth in claim 1. Therefore claim 25 is rejected for the same rationale set forth in claim 1.
- 12. As per claim 26, Lamberton-Dynarski disclose a cache database, coupled to the domain name server for storing previously selected IP routes [Lamberton, database, col 1 lines 55-60].
- 13. As per claim 27, Lamberton-Dynarski disclose the IP routes database is for storing all of the IP routes [Lamberton, database, col 1 lines 55-60].

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- 14. As per claim 28, Lamberton-Dynarski disclose a domain name system server includes an enhanced address resource record storing the single domain name, a list of the servers and routers, a set of router retrieval parameters, a default IP router; and the domain name system server accesses the retrieval parameters in order to select the IP routes [Lamberton, a single DNS name, group of server, col 4 line64-col 5 line 26].
- 15. As per claim 29, Lamberton-Dynarski disclose the client IP address corresponds to a client and the set of server IP addresses correspond to respective servers, wherein the set of IP routes comprises IP routes from the client to respective servers, and wherein selecting the IP route comprises selecting the IP route corresponding to the server that satisfies the predetermined criteria [Lamberton, met the criterion for being elected, col 6 lines 35-40; selected server carrying the actual DNS name as required, col 7 lines 11-27, Fig 4].
- 16. As per claim 30, Lamberton-Dynarski disclose selecting the IP route to the server associated with a shortest path from the client [Lamberton, select the least busy of the servers, col 6 line 28].
- 17. As per claim 31, Lamberton-Dynarski disclose the assigning, receiving, retrieving, and selecting acts are performed by a domain name system (DNS) server [Lamberton, DNS, col 6 lines 6-67].
- As per claim 32, Lamberton-Dynarski disclose retrieving a set of IP routes where each IP route is defined by at least two IP addresses [Lamberton, IP routes between client and server, col 5 lines 1-26].

- 19. As per claim 33, Lamberton-Dynarski disclose prior to retrieving the set of IP routes, checking a database in a cache to find an IP route entry containing an IP route previously indicated as being a best IP route; and in response to finding the IP route entry in the cache, using the IP route previously indicated as being the best IP route as the selected IP route [Lamberton, select the least busy of the servers, col 6 line 6-67].
- 20. As per claim 34, Lamberton-Dynarski disclose retrieving the set of IP routes is performed from an IP routes database, and wherein retrieving the set of IP routes from the IP routes database is in response to determining that the IP route entry is not present in the cache [Dynarski, searching database to determine if a session already exists" col 15 line 52-54].
- 21. As per claim 35, Lamberton-Dynarski disclose accessing a field in a record, the field to indicate one of plural techniques for downloading IP routes from routers to the DNS server; and based on the technique identified by the field, establish one or more sessions with the routers to download IP routes from the routers into an IP routes database in the DNS server, wherein retrieving the set of IP routes is performed from the IP routes database [Dynarski, searching database to determine if a session already exists" col 15 line 52-54].
- 22. As per claim 36, Lamberton-Dynarski disclose establishing one or more Border Gateway Protocol (BGP) sessions with the routers to download IP routes from the routers into the IP routes database, in response to the field indicating use of BGP retrieval [Dynarski, gateway router 22, IP router 18, Fig 1A, database, col 15 line 51].

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- 23. As per claim 39, Lamberton-Dynarski disclose establishing one of plural different types of sessions corresponding to the one of plural techniques specified by the field to download IP routes from the routers into the IP routes database [Lamberton, different servers, col 6 line 1].
- 24. Claims 15-17,19-24;40-48 and 25-28,49-53 contain similar limitations set forth in claims 1-4,6-12,14,29-36,39. Therefore claims 15-17,19-24;40-48 and 25-28,49-53 are rejected for the same rationale set forth in claims 1-4,6-12,14,29-36,39.
- 25. As per claims 5,18 Lamberton discloses an Internet environment with firewall and group or set of servers [Lamberton, Fig 2].

However Lamberton does not explicitly detail "using an SNMP protocol".

In the same endeavor, Dynarski discloses a method for allocation wireless mobile nodes over Internet network including SNMP and Telnet [Dynarski, col 14 lines 1-7].

Therefore it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate the SNMP and Telnet services as taught by Dynarski into the Lamberton's apparatus in order to utilize the DART network interacts with other technologies. Doing so would provide a simple, efficient and automatic way of permitting the terminal on the IP network to initiate communication with the wireless device [Dynarski, col 2 lines 15-26].

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26. As per claim 13, Lamberton-Dynarski disclose defining an enhanced address resource record, including a domain name, a list of corresponding servers and routers, router retrieval parameters, a default client/server IP route, and timeouts [Dynarski, IP link, col 8 lines 9-18; Dormant state, col 13 lines 4-8, domain, col 16 lines 50-67].

- 27. As per claims 37, Lamberton-Dynarski disclose establishing one or more Simple Network Management Protocol (SNMP) sessions with the routers to download IP routes from the routers into the IP routes database, in response to the field indicating use of Management Information Base (MIB) [Dynarski, SNMP, col 14 lines 1-7].
- 28. As per claim 38, Lamberton-Dynarski disclose establishing one or more Telnet sessions with the routers to download IP routes from the routers into the IP routes database, in response to the field indicating use of Telnet retrieval [Dynarski, Telnet, col 14 lines 1-7].

(10) Response to Argument

1. Claims 1-3,5,11,12,14-16,18,24-27,29-32,40-43,51-53:

A. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

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In this case, (claim 1) examiner points out:

a single domain name to a set of server IP addresses corresponding to plural servers receiving a request for the domain name from a client IP address [Lamberton, single DNS, IP address, the cluster of servers, col 5 lines 1-26];

retrieving a set of IP routes linking the server IP addresses and the client IP address [Lamberton, supporting a given of set of services, col 5 lines 30-35; a packet contains the source IP address and destination address as the IP address of the cluster server, col 5 lines 14];

selecting an IP route from the set of routes which meets (predetermined) criteria [Lamberton, the set of services advertised for the web site of a cluster of servers, col 6 lines 10-15; the request is forwarded to server that met the criterion for being elected, col 6 lines 35-40].

However Lamberton does not explicitly detail

Predetermined criteria

An Ordinary skill in the art would look into the Internet-DNS art to improve the Lamberton's apparatus performance and found Dynarski's teaching.

Dynarski taught the computer network may exchange information [Dynarski, Internet, col 5 line 7; IP address domain, col 16 line 64] and searching a database to determine if a system bus/PPP session or path already exists [Dynarski, col 15 lines 50-55]. It's clearly that the session already exists represent a route or PPP link between client/server nodes.

Therefore it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate the technique of selecting an IP address from a database contain a set of addresses with predetermined criteria or PPP sessions as taught by Dynarski into the Lamberton's apparatus in order utilize the exchange information process between network nodes.

Doing so would provide a simple, efficient and automatic way of permitting the communication between nodes.

B. Applicant argues the prior art does not teach "assigning or selecting a set of server addresses"

Examiner points out the prior art taught selecting an IP route from the set of routes [Lamberton, the set of services advertised for the web site of a cluster of servers, col 6 lines 10-15].

2. Claims 4,6,7,17,19,20,36-38,45,47,50:

Applicant argues the prior art does not teach "BGP protocol, Telnet protocol, shortest AS path"

Examiner points out the prior art taught the firewall, gateway [Lamberton, col 6] line 33]. It is well-known in the art. That a gateway or BGP, router provides the shortest path.

3. Claims 8,21:

Applicant argues the prior art does not teach "selecting an IP route that has a lowest origin type"

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Examiner points out the prior art taught "the least busy or lowest MED of the servers is selected" [Lamberton, col 6 line 28].

4. Claims 9,22:

Applicant argues the prior art does not teach "selecting an IP route that has a lowest MED"

Examiner points out the prior art taught "the least busy or lowest MED of the servers is selected" [Lamberton, col 6 line 28].

5.Claims 10,23:

Applicant argues the prior art does not teach "selecting an IP route that has is equal to a default IP address"

Examiner points out the prior art taught "the default set or parameters will allow normal operations" [Dynarski, col 13 line 66].

6.Claims 13,28:

Applicant argues the prior art does not teach "defining an enhanced address resource record, including a domain name, a list of corresponding servers and routers, router retrieval parameters, a default client/server IP route, and timeouts"

Examiner points out the prior art taught "the default set or parameters will allow normal operations" [Dynarski, col 13 line 66].

7.Claims 33,34:

Applicant argues the prior art does not teach "retrieving the set of IP routes, checking a database in a cache to find an IP route entry containing an IP route previously indicated as being a best IP route; and in response to finding the IP route

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entry in the cache, using the IP route previously indicated as being the best IP route as the selected IP route"

Examiner points out the prior art taught "the Load Balancer machine decides which server is best to accept requests [Lamberton, col 5 line 6]

8. Claims 35,39,44,46,48,49:

Applicant argues the prior art does not teach "a field in a record, the field to indicate one of plural techniques for downloading IP routes from routers to the DNS server; and based on the technique identified by the field, establish one or more sessions with the routers to download IP routes from the routers into an IP routes database in the DNS server, wherein retrieving the set of IP routes is performed from the IP routes database"

Examiner points out the prior art taught "searching database to determine if a session already exists" [Dynarski, col 15 line 52-54]. It's clearly the database search provides the records of session or the set of IP route.

Thus, the rejection is sustained.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Thong H Vu/

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